



Pace Analytical Services
PO Box 286
Beaver, WV 25813
TEL: (304) 255-2500
Website: www.reiclabs.com

782 North Lee Highway
Lexington, VA 24450
TEL: 540.464.1880

16 Commerce Drive
Westover, WV 26501
TEL: 304.241.5861

Mr. Josh Billiter
CITY OF PADEN CITY
310 S 4TH AVE.
PO BOX 211
PADEN CITY, WV 26159

Thursday, January 03, 2019

TEL: (304) 337-8240
FAX: (304) 337-4036

RE: DRINKING WATER
Work Order #: 18123247
Dear Mr. Josh Billiter:

Pace Analytical Services received 8 sample(s) on 12/26/2018 for the analyses presented in the following report.

Sincerely,

Scott Gross
Project Manager
(304) 250-6220



Client: CITY OF PADEN CITY

Project: DRINKING WATER

The analytical results presented in this report were produced using documented laboratory SOPs that incorporate appropriate quality control procedures as described in the applicable methods. Verification of required sample preservation (as required) is recorded on associated laboratory logs. Any deviation from compliance or method modification is identified within the body of this report by a qualifier footnote which is defined at the bottom of this page.

All sample results for solid samples are reported on an "as-received" wet weight basis unless otherwise noted.

Results reported for sums of individual parameters, such as TTHM and HAA5, may vary slightly from the sum of the individual parameter results, due to rounding of individual results, as required by EPA.

The test results in this report meet all NELAP and/or VELAP requirements for parameters clearly designated as PA, VA, PA/VA, or VELAP in the column labeled NELAP.

Please note if the sample collection time is not provided on the Chain of Custody, the default recording will be 0:00:00. This may cause some tests to be apparently analyzed out of hold.

All tests performed by the Lexington and Morgantown Service Centers are designated by an annotation on the test code. All other tests were performed by Pace Analytical Services, LLC Laboratory in Beaver, WV. Subcontracted results are attached to the end of the report.

This report may not be reproduced, except in full, without the written approval of Pace Analytical Services, LLC.

All samples are stored for a minimum of 14 days after the date of the final report. All records are stored for a minimum of 5 years. If longer sample or records retention is required, please contact your project manager for details.

DEFINITIONS:

MCL: Maximum Contaminant Level

MDL: Method Detection Limit; The lowest concentration of analyte that can be detected by the method in the applicable matrix.

Mg/Kg or mg/L: Units of part per million (PPM) - milligram per Kilogram (weight/weight) or milligram per Liter (weight/volume).

NA: Not Applicable

ND: Not Detected at the PQL or MDL

PQL: Practical Quantitation Limit; The lowest verified limit to which data is quantified without qualifications. Analyte concentrations below PQL are reported either as ND or as a number with a "J" qualifier.

Qual: Qualifier that applies to the analyte reported.

TIC: Tentatively Identified Compound, Estimated Concentration denoted by "J" qualifier.

Ug/Kg or ug/L: Units of part per billion (PPB) - microgram per kilogram (weight/weight) or microgram per liter (weight/volume).

QUALIFIERS:

X: Reported value exceeds required MCL

B: Analyte detected in the associated Method Blank at a concentration > 1/2 the PQL

E: Analyte concentration reported that exceeds the upper calibration standard. Greater uncertainty is associated with this result and data should be considered estimated.

H: Holding time for preparation or analysis has been exceeded.

J: Analyte concentration is reported, and is less than the PQL and greater than or equal to the MDL. The result reported is an estimate.

S: % REC (% recovery) exceeds control limits

CERTIFICATIONS:

Beaver, WV: WVDHHR 00412CM, WVDEP 060, VADCLS 00281, KYDEP 90039, NCDWQ 466, PADEP 68-00839, VADCLS(VELAP) 460148

Bioassay (Beaver, WV): WVDEP 060, VADCLS(VELAP) 460148, PADEP 68-00839

Lexington, VA: VADCLS(VELAP) 460150

Morgantown, WV: WVDHHR 003112M, WVDEP 387

Pace Analytical Services - Analytical Report

WO#: 18123247

Date Reported: 1/3/2019

Original

| | | | |
|-------------------|--------------------|------------------|-----------------------|
| Client: | CITY OF PADEN CITY | Collection Date: | 12/26/2018 8:54:00 AM |
| Project: | DRINKING WATER | Date Received: | 12/26/2018 |
| Lab ID: | 18123247-01A | Matrix: | Drinking Water |
| Client Sample ID: | 707 N 4TH AVE | Site ID: | 33-0-5204 |

| Analysis | Result | MDL | PQL | MCL | Qual | Units | Date Analyzed | NELAP |
|--------------------------------------|--------|-----|-------------------------|-----|------|-------|--------------------|-------|
| COLIFORM BY P/A - MORGANTOWN: | | | Method: COLISURE | | | | Analyst: RM | |
| E-Coli | ABSENT | NA | NA | NA | | NA | 12/26/2018 2:35 PM | |
| Total Coliform | ABSENT | NA | NA | NA | | NA | 12/26/2018 2:35 PM | |

Pace Analytical Services - Analytical Report

WO#: 18123247

Date Reported: 1/3/2019
Original

| | | | |
|-------------------|--------------------|------------------|-----------------------|
| Client: | CITY OF PADEN CITY | Collection Date: | 12/26/2018 9:35:00 AM |
| Project: | DRINKING WATER | Date Received: | 12/26/2018 |
| Lab ID: | 18123247-02A | Matrix: | Drinking Water |
| Client Sample ID: | 320 S 4TH AVE | Site ID: | 33-0-5204 |

| Analysis | Result | MDL | PQL | MCL | Qual | Units | Date Analyzed | NELAP |
|--------------------------------------|--------|-----|-------------------------|-----|------|-------|--------------------|-------|
| COLIFORM BY P/A - MORGANTOWN: | | | Method: COLISURE | | | | Analyst: RM | |
| E-Coli | ABSENT | NA | NA | NA | | NA | 12/26/2018 2:35 PM | |
| Total Coliform | ABSENT | NA | NA | NA | | NA | 12/26/2018 2:35 PM | |

Pace Analytical Services - Analytical Report

WO#: 18123247

Date Reported: 1/3/2019
Original

| | | | |
|-------------------|--------------------|------------------|-----------------------|
| Client: | CITY OF PADEN CITY | Collection Date: | 12/26/2018 9:48:00 AM |
| Project: | DRINKING WATER | Date Received: | 12/26/2018 |
| Lab ID: | 18123247-03A | Matrix: | Drinking Water |
| Client Sample ID: | 309 S 1ST AVE | Site ID: | 33-0-5204 |

| Analysis | Result | MDL | PQL | MCL | Qual | Units | Date Analyzed | NELAP |
|--------------------------------------|--------|-----|-------------------------|-----|------|-------|--------------------|-------|
| COLIFORM BY P/A - MORGANTOWN: | | | Method: COLISURE | | | | Analyst: RM | |
| E-Coli | ABSENT | NA | NA | NA | | NA | 12/26/2018 2:35 PM | |
| Total Coliform | ABSENT | NA | NA | NA | | NA | 12/26/2018 2:35 PM | |

Pace Analytical Services - Analytical Report

WO#: 18123247

Date Reported: 1/3/2019
Original

| | | | |
|-------------------|--------------------|------------------|-----------------------|
| Client: | CITY OF PADEN CITY | Collection Date: | 12/26/2018 9:38:00 AM |
| Project: | DRINKING WATER | Date Received: | 12/26/2018 |
| Lab ID: | 18123247-04A | Matrix: | Drinking Water |
| Client Sample ID: | 320 S 4TH AVE | Site ID: | 33-0-5204 |

| Analysis | Result | MDL | PQL | MCL | Qual | Units | Date Analyzed | NELAP |
|------------------------------|--------|------|--------------------------------------|------|------|-------|---------------------|-------|
| ANIONS by ION CHROMATOGRAPHY | | | Method: EPA 300.0, Rev.2.1 (1993) | | | | Analyst: CF | |
| Fluoride | 0.26 | 0.05 | 0.20 | 4.00 | | mg/L | 12/27/2018 10:55 AM | PA/VA |

Pace Analytical Services - Analytical Report

WO#: 18123247

Date Reported: 1/3/2019
Original

| | | | |
|-------------------|--------------------|------------------|-----------------------|
| Client: | CITY OF PADEN CITY | Collection Date: | 12/26/2018 9:06:00 AM |
| Project: | DRINKING WATER | Date Received: | 12/26/2018 |
| Lab ID: | 18123247-05A | Matrix: | Drinking Water |
| Client Sample ID: | WATER PLANT RAW | Site ID: | 33-0-5204 |

| Analysis | Result | MDL | PQL | MCL | Qual | Units | Date Analyzed | NELAP |
|------------------------------|--------|-------|-----------------------------|------|------|-------|--------------------|-------|
| VOLATILE ORGANIC COMPOUNDS | | | Method: EPA 524.2, Rev. 4.1 | | | | Analyst: ES | |
| Tetrachloroethene | 14.7 | 0.250 | 0.500 | 5.00 | X | µg/L | 12/28/2018 6:19 AM | |
| Surr: 1,2-Dichlorobenzene-d4 | 75.2 | NA | 70-130 | NA | | %Rec | 12/28/2018 6:19 AM | |
| Surr: 4-Bromofluorobenzene | 88.6 | NA | 70-130 | NA | | %Rec | 12/28/2018 6:19 AM | |

Pace Analytical Services - Analytical Report

WO#: 18123247

Date Reported: 1/3/2019
Original

| | | | |
|-------------------|--------------------|------------------|-----------------------|
| Client: | CITY OF PADEN CITY | Collection Date: | 12/26/2018 9:09:00 AM |
| Project: | DRINKING WATER | Date Received: | 12/26/2018 |
| Lab ID: | 18123247-06A | Matrix: | Drinking Water |
| Client Sample ID: | WATER PLANT FINISH | Site ID: | 33-0-5204 |

| Analysis | Result | MDL | PQL | MCL | Qual | Units | Date Analyzed | NELAP |
|------------------------------|--------|-------|-----------------------------|------|------|-------|--------------------|-------|
| VOLATILE ORGANIC COMPOUNDS | | | Method: EPA 524.2, Rev. 4.1 | | | | Analyst: ES | |
| Tetrachloroethene | 6.83 | 0.250 | 0.500 | 5.00 | X | µg/L | 12/28/2018 6:48 AM | |
| Surr: 1,2-Dichlorobenzene-d4 | 75.0 | NA | 70-130 | NA | | %Rec | 12/28/2018 6:48 AM | |
| Surr: 4-Bromofluorobenzene | 89.7 | NA | 70-130 | NA | | %Rec | 12/28/2018 6:48 AM | |

Pace Analytical Services - Analytical Report

WO#: 18123247

Date Reported: 1/3/2019
Original

| | | | |
|-------------------|--------------------|------------------|-----------------------|
| Client: | CITY OF PADEN CITY | Collection Date: | 12/26/2018 9:37:00 AM |
| Project: | DRINKING WATER | Date Received: | 12/26/2018 |
| Lab ID: | 18123247-07A | Matrix: | Drinking Water |
| Client Sample ID: | 320 S 4TH AVE | Site ID: | 33-0-5204 |

| Analysis | Result | MDL | PQL | MCL | Qual | Units | Date Analyzed | NELAP |
|------------------------------|--------|-----------------------------|--------|------|------|-------|---------------------|-------|
| VOLATILE ORGANIC COMPOUNDS | | Method: EPA 524.2, Rev. 4.1 | | | | | Analyst: ES | |
| Tetrachloroethene | 5.98 | 0.250 | 0.500 | 5.00 | X | µg/L | 12/28/2018 11:07 AM | |
| Surr: 1,2-Dichlorobenzene-d4 | 78.2 | NA | 70-130 | NA | | %Rec | 12/28/2018 11:07 AM | |
| Surr: 4-Bromofluorobenzene | 92.3 | NA | 70-130 | NA | | %Rec | 12/28/2018 11:07 AM | |

Pace Analytical Services - Analytical Report

WO#: 18123247

Date Reported: 1/3/2019
Original

| | | | |
|-------------------|--------------------|------------------|------------------------|
| Client: | CITY OF PADEN CITY | Collection Date: | 12/26/2018 12:00:00 AM |
| Project: | DRINKING WATER | Date Received: | 12/26/2018 |
| Lab ID: | 18123247-08A | Matrix: | Trip Blank |
| Client Sample ID: | TRIP BLANK | Site ID: | 33-0-5204 |

| Analysis | Result | MDL | PQL | MCL | Qual | Units | Date Analyzed | NELAP |
|------------------------------|--------|-------|-----------------------------|------|------|-------------|---------------------|-------|
| VOLATILE ORGANIC COMPOUNDS | | | Method: EPA 524.2, Rev. 4.1 | | | Analyst: ES | | |
| Tetrachloroethene | ND | 0.250 | 0.500 | 5.00 | | µg/L | 12/28/2018 12:04 PM | |
| Surr: 1,2-Dichlorobenzene-d4 | 77.5 | NA | 70-130 | NA | | %Rec | 12/28/2018 12:04 PM | |
| Surr: 4-Bromofluorobenzene | 91.6 | NA | 70-130 | NA | | %Rec | 12/28/2018 12:04 PM | |



Pace Analytical Services, LLC.
PO Box 684056
Chicago, IL 60695-4056
TEL: (304)255-2500
Website: www.reiclabs.com

Sample Receipt Checklist

| | | | | | |
|-----------------|-------------------------------|-------------------------|-------------------------------|--------------------|---------------------|
| Client Name: | PAD001 | | | Work Order Number: | 18123247 |
| RCPNo: | 1 | Date and Time Received: | 12/26/2018 10:10:36 PM | Received by: | Holly Glisan |
| Completed By: | Noah Gill | Reviewed By: | Billy Shirley | | |
| Completed Date: | 12/26/2018 10:23:53 PM | Reviewed Date: | 12/27/2018 9:51 AM | | |

Carrier Name: Pace

| | | | | |
|-----|---|---|-----------------------------|---|
| 1. | Chain of custody present? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 2. | Chain of custody signed when relinquished and received? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 3. | Are matrices correctly identified on Chain of custody? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 4. | Is it clear what analyses were requested? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 5. | Custody seals intact? | Yes <input type="checkbox"/> | No <input type="checkbox"/> | Not Present <input checked="" type="checkbox"/> |
| 6. | Samples in proper container type and preservative? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 7. | Were correct preservatives noted on COC? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | NA <input type="checkbox"/> |
| 8. | Sample containers intact? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 9. | Sufficient sample volume for indicated test? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 10. | Were container labels complete? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 11. | All samples received within holding time? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 12. | Was an attempt made to cool the samples? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | NA <input type="checkbox"/> |
| 13. | Sample Temp. taken and recorded upon receipt? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | To 0.2 °C |
| 14. | Water - Were bubbles absent in VOC vials? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | No Vials <input type="checkbox"/> |
| 15. | Are Samples considered acceptable? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 16. | COC filled out properly? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |

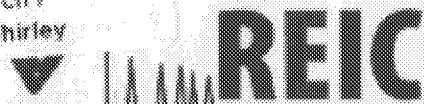
Client Notification/Response

| | | | | | |
|----------------------|--------------------------------|-------------------------------|--|-------------------------------------|-----------------|
| Client Name: | PAD001 | | | Work Order Number: | 18123247 |
| Comment: | | | | | |
| Client Contacted: | Yes <input type="checkbox"/> | No <input type="checkbox"/> | NA <input checked="" type="checkbox"/> | Person Contacted: | |
| Contact Mode: | Phone <input type="checkbox"/> | Fax: <input type="checkbox"/> | Email: <input type="checkbox"/> | In Person: <input type="checkbox"/> | |
| Date Contacted: | Contacted By: | | | | |
| Regarding: | | | | | |
| Client Instructions: | | | | | |
| Corrective Action: | | | | | |



PAD001
CITY OF PADEN CITY
Billy Shirley

ISTODY RECORD



Research Environmental & Industrial Consultants, Inc.
A Division of Pace Analytical

MAIN LABORATORY:

P.O. Box 286 • 225 Industrial Park Rd, Beaver, WV 25813
800-999-0105 • 304-323-2500 • www.reiclabs.com

LEXINGTON Service Center

262 N. Lee Hwy. Lexington, VA 24450
540-777-1276

MORGANTOWN Service Center

16 Commerce Dr., Westover, WV 26061
304-241-5861

v14-0318

REIC ONLY

CLIENT ID

DATE

SHEET

Client: City of Padon City

PO #

Contact Person: Josh Balliter

Phone: 304-317-2840

Address: PO Box 211

City: Padon City

State: WV Zip: 26159

Billing Address (if different)

City

State

Zip

Site ID & State: 33-0-5204

Proj ID: Drinking Water

Sampler: JP

TURNAROUND TIME



NORMAL

RUSH TURNAROUND*



1 DAY



2 DAY



3 DAY



1 DAY

* Rush work needs prior laboratory approval and will incur additional charges

Send Results Via:



Email



Fax

All analytical requests are subject to REIC's Standard Terms and Conditions.

| SAMPLE ID | No. & Type of Containers | Sampling Date/Time | Matrix | Sample Comp/Grab | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|--------------------|--------------------------|--------------------|---------|------------------|-------------------------------------|---|---|---|---|---|---|---|---|----|----|----|
| 707 N 4th Ave | 1 Bottle | 12/16/18 8:51 | D Water | Grab | <input checked="" type="checkbox"/> | | | | | | | | | | | |
| 320 S 4th Ave | 1 Bottle | 12/16/18 9:30 | D Water | Grab | <input checked="" type="checkbox"/> | | | | | | | | | | | |
| 309 S 1st Ave | 1 Bottle | 12/16/18 9:42 | D Water | Grab | <input checked="" type="checkbox"/> | | | | | | | | | | | |
| 320 S 4th Ave | 1 Bottle | 12/16/18 9:48 | D Water | Grab | <input checked="" type="checkbox"/> | | | | | | | | | | | |
| Water Plant Raw | 3 Vials | 12/16/18 9:16 | D Water | Grab | <input checked="" type="checkbox"/> | | | | | | | | | | | |
| Water Plant Finish | 3 Vials | 12/16/18 9:29 | D Water | Grab | <input checked="" type="checkbox"/> | | | | | | | | | | | |
| 320 S 4th Ave | 3 Vials | 12/16/18 9:57 | D Water | Grab | <input checked="" type="checkbox"/> | | | | | | | | | | | |
| TRIP BLANK | 16 | 12/26/18 | | | | | | | | | | | | | | |

ENTER PRESERVATIVE CODE(S):

- | | |
|----------------------|-----------------------------|
| 0 None | 7 Ascorbic Acid |
| 1 Hydrochloric Acid | 8 Sodium Bisulfite/Methanol |
| 2 Nitric Acid | 9 Ammonium Chloride |
| 3 Sulfuric Acid | 10 CR Buffer |
| 4 Sodium Thiosulfate | 11 Sodium Sulfite/ |
| 5 Sodium Hydroxide/ | Hydrochloric Acid |
| 6 Sodium Hydroxide | 12 |

* (Use blank for a preservative not listed)

COMMENTS:

CUSTODY SEALS: 119 148

Corrected temp at initial: 0.2C ICED? YES N IR# 5 Containers provided by: REIC Client Delivered by: REIC Client UPS FedEx USPS

| | | | | | | | | | | | | | | | | |
|-------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| REC'D | 12/26/18 2:24 | 12/26/18 12:29 | 12/26/18 12:29 | 12/26/18 12:29 | 12/26/18 12:29 | 12/26/18 12:29 | 12/26/18 12:29 | 12/26/18 12:29 | 12/26/18 12:29 | 12/26/18 12:29 | 12/26/18 12:29 | 12/26/18 12:29 | 12/26/18 12:29 | 12/26/18 12:29 | 12/26/18 12:29 | 12/26/18 12:29 |
| REC'D | 12/26/18 12:29 | 12/26/18 12:29 | 12/26/18 12:29 | 12/26/18 12:29 | 12/26/18 12:29 | 12/26/18 12:29 | 12/26/18 12:29 | 12/26/18 12:29 | 12/26/18 12:29 | 12/26/18 12:29 | 12/26/18 12:29 | 12/26/18 12:29 | 12/26/18 12:29 | 12/26/18 12:29 | 12/26/18 12:29 | 12/26/18 12:29 |
| REC'D | 12/26/18 12:29 | 12/26/18 12:29 | 12/26/18 12:29 | 12/26/18 12:29 | 12/26/18 12:29 | 12/26/18 12:29 | 12/26/18 12:29 | 12/26/18 12:29 | 12/26/18 12:29 | 12/26/18 12:29 | 12/26/18 12:29 | 12/26/18 12:29 | 12/26/18 12:29 | 12/26/18 12:29 | 12/26/18 12:29 | 12/26/18 12:29 |
| REC'D | 12/26/18 12:29 | 12/26/18 12:29 | 12/26/18 12:29 | 12/26/18 12:29 | 12/26/18 12:29 | 12/26/18 12:29 | 12/26/18 12:29 | 12/26/18 12:29 | 12/26/18 12:29 | 12/26/18 12:29 | 12/26/18 12:29 | 12/26/18 12:29 | 12/26/18 12:29 | 12/26/18 12:29 | 12/26/18 12:29 | 12/26/18 12:29 |